



GLOBAL CLIMATE CHANGE INITIATIVE

CLIMATE RESILIENT DEVELOPMENT

BUILDING CLIMATE RESILIENCE TO SAFEGUARD **DEVELOPMENT GAINS**



USAID's climate resilient development initiatives reduce vulnerability to today's climatic extremes while helping developing countries prepare for current and future changes in climate. Coastal storms, floods, droughts, and other expected changes in climate can undo decades of progress and investments in development. In just a few short hours, a storm can damage or destroy homes, lives, livelihoods, commercial and industrial operations, and infrastructure. In a few months, an extended drought can put economic networks, food security, and individual livelihoods at risk.

USAID is working to ensure that developing countries' economic, social, and environmental systems are prepared to withstand both today's climate and that of tomorrow. Building resilience to changes in temperature, precipitation, sea level, and weather events will help protect development gains already achieved while improving future development outcomes.

ADAPTATION: MANAGING FOR CHANGE

USAID is committed to helping vulnerable countries prepare for climate change by successfully adapting to current and future climate impacts. Adaptation strategies can be as simple as installing bigger culverts under roads to handle water flow from heavier storms, or as complex as developing new crop varieties that can thrive under drier conditions in the future. USAID recognizes the importance of incorporating climate as one of many considerations in daily decision-making, regardless of the scale and scope of adaptation actions. USAID is helping developing countries build their capacity to adapt by identifying and preparing for changes in climate. By doing so, developing countries will build resilience and be better prepared for the risks they face today as well as the changes projected for the decades ahead.

BUILDING RESILIENCE TO CLIMATE CHANGE

USAID supports climate change adaptation through a "development-first" approach that works with countries to explore how a changing climate can affect development goals, to identify trends and future risks, and to increase the resilience of people, places, and livelihoods. This approach is being implemented through the following broad steps:

WHAT IS ADAPTATION?

Climate change is global, but its impacts are local. As temperatures rise, communities around the world will have to adapt to a variety of changes, including sea level rise and changes in rainfall, droughts, storms, and other weather events. There is no single best way to adapt.

USAID supports climate change adaptation in over 30 countries, ensuring communities around the world can access climate science, promote effective governance, and identify actions that build resilience to climate change.

CLIMATE IMPACTS IN JAMAICA





Between 2001 and 2010, extreme weather events in Jamaica caused about US\$1.1 billion (\$111.8 billion in Jamaican dollars) in damages, with average annual losses amounting to 2 percent of the nation's GDP.



NEPAL: HIGH MOUNTAINS ADAPTATION PARTNERSHIP (HIMAP)

The Challenge

Melting glaciers have created large, fast-growing lakes in the mountains of Nepal. These lakes can burst through the natural dams that hold them back, causing flash floods, deaths, and extensive damage to villages,

agricultural fields, and tourism infrastructure in the valleys below.

vulnerable agriculture Less economic damage

Less

Melting glaciers

OPTIONS FOR CLIMATE ADAPTATION

Flood detention structures

Flood warning systems

Spillway
construction

Flash floods More resilient tourism

Less loss

of life

USAID's Response

Through HiMAP, USAID is facilitating the transfer of knowledge from Peru, where engineers have 40 years of experience managing glacial lakes, to Nepal. In addition, USAID is supporting scientific research to collect and analyze glacial lake data and develop new approaches for evaluating the risk of glacial lake outburst floods (GLOFs). These efforts are shaping how Nepal's dangerous glacial lakes will be managed in the future.

www.highmountains.org

Improving Access to Science and Analysis for Decision-Making

Much of USAID's work in this area focuses on climate services, which involve the production, interpretation, sharing, and use of knowledge about climate and weather to support decision-making, policy, and planning. In Latin America, USAID provides small grants that enable farmers to access the best available climate information and make informed planting decisions to prevent the crippling crop failures that often accompany El Niño conditions. In Africa and the Caribbean, USAID supports the training of meteorologists to help planners understand potential climate hazards. In Africa, MesoAmerica, and the Hindu Kush-Himalaya region, USAID and NASA support SERVIR, a network of global satellite hubs offering earth observation and visualization tools to support decisions affecting health, environment, and disaster preparedness. These and other efforts are transforming the ability of developing countries to use science to improve their decision-making processes and strategies. www.servirglobal.net

Promoting Effective Governance Systems

USAID supports partner countries in taking leadership roles on adaptation as they plan for development. For example, USAID is supporting Jamaica in its development of a new policy framework for achieving national goals, such as increased tourism and economic development, in the face of climate variability and change. In Ethiopia, USAID is integrating adaptation considerations across its development portfolio to help minimize the risks of hunger, displacement, and disease due to current and projected extreme weather events. USAID coordinates with international stakeholders and partners to share knowledge and experience through collaborative ventures, such as the Adaptation Partnership. www.adaptationpartnership.org

Taking Actions that Promote Climate Resilience

Good science and governance underpin the actions that can help countries achieve development objectives that are threatened by climate variability and change. USAID is taking action by creating new tools to help developing countries implement adaptation measures quickly and effectively. For example, USAID analyzed threats to the Marshall Islands from El Niño-driven droughts and rising sea levels, and helped to develop options to provide fresh water, such as improved rainwater harvesting, that avoid costly emergency measures. USAID is supporting the development of affordable index insurance designed specifically for poor households in Africa and the Caribbean, where livelihoods can be threatened by drought and other adverse weather events. The insurance enables farmers and herders to take profitable risks to increase productivity in good years—and also have a safety net in case of bad weather years.

WHY IT IS IMPORTANT TO ADDRESS CLIMATE CHANGE

USAID's adaptation programs integrate climate into daily development decision-making and project planning, with the goal of helping partner countries become climate-ready so they can withstand—on their own—the impacts of a changing climate on economic investment, human health, agriculture and food security, water and sanitation, and other development objectives.